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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,579	07/19/2006	Reiner Kunstle	4241 PCTUS FR/eb (60729.O)	7388
69638 7590 03/31/2009 KAMRATH & ASSOCIATES P.A. 4825 OLSON MEMORIAL HIGHWAY SUITE 245 GOLDEN VALLEY, MN 55422			EXAMINER NGUYEN, XUAN LAN T	
			ART UNIT 3657	PAPER NUMBER
			MAIL DATE 03/31/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,579	Applicant(s) KUNSTLE ET AL.	
	Examiner Lan Nguyen	Art Unit 3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/26/07</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).
2. To further prosecution, drawings from the PCT/EP2005/000326 application have been used in the examination. Applicant is required to submit drawings as stated above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claim 1-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beringer's Aeronal brake disc as described in Applicant's specification page 1, in view of Gehrs (USPub. 2005/0082125).

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Re: claims 1, 2, 13, 16 and 17, Beringer shows a brake disk for a disk brake, in particular for motor cycles or bicycles, as in the present invention, comprising: a brake band made of steel and an inner part made of aluminum for fixing on a hub, the brake band having a plurality of extensions and the inner part having a plurality of extensions wherein the extensions are connected by connecting elements and the connecting line with an angle about 12 degrees. Claim 1 requires the angle to be between 15 degrees to 85 degrees. Gehrs shows in figures 4-7 the various angles that the extensions between a brake band and an inner part could possibly be to reduce the rotation torque on the connecting elements 40. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Beringer's disc to comprise the larger angles as taught by Gehrs in order to reduce the rotation torque on the connecting elements and to prolong the life of the disc.

Re: claims 3-5, 7, 9 and 20, Beringer teaches this claimed feature.

Re: claims 6 and 8, figure 6 of Gehrs shows that gamma is larger than alpha and beta.

Re: claims 10 and 11, Gehrs shows the bottom recess to be greater than 180 degrees.

Re: claim 12, Gehrs shows the connecting elements 40 to be bolts.

Re: claim 15, Gehrs shows the brake band having holes which are in the form of slots.

Re: claims 18 and 19, Gehrs shows the extensions of the inner part each have a strut which is at the front in a direction of rotation during forward travel and a strut which

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is at back in the direction of rotation during forward travel wherein the rear strut lie in the braking force direction in figure 7.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beringer's Aeronal brake disc as described in Applicant's specification page 1, in view of Gehrs (USPub. 2005/0082125) and further in view of Seymour (6,467,589).

Beringer's disc, as modified and rejected above, lacks the corrugation. Seymour teaches in figures 4 and 5 the alternative shapes of a brake disc wherein the disc in figure 5 is corrugated in order to further reducing weight while maintaining the strength of the disc. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Beringer's disc to comprise the corrugated shape as taught by Seymour in order to reduce weight while maintaining the strength of the disc.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Izumine is cited for another disc.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xuan Lan Nguyen/
Primary Examiner
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